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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------|------------------|
| 09/782,539  | 02/13/2001  | Daniele Brotto       | TN-1379A              | 3388             |
| 7590  | 11/08/2004  |                      | EXAMINER              |                  |
| Adan Ayala, Esq.<br>The Black & Decker Corporation<br>701 East Joppa Road<br>Towson, MD 21286 |             |                      | TIBBITS, PIA FLORENCE |                  |
|   |             |                      | ART UNIT              | PAPER NUMBER     |
|   |             |                      | 2838                  |                  |

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                           |                  |
|------------------------------|---------------------------|------------------|
| <b>Office Action Summary</b> | Application No.           | Applicant(s)     |
|                              | 09/782,539                | BROTTO ET AL.    |
|                              | Examiner<br>Pia F Tibbits | Art Unit<br>2838 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 14 October 2004.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 25,26 and 30-32 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 25,26 and 30-32 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 13 February 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)                            4) Interview Summary (PTO-413)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                            Paper No(s)/Mail Date. \_\_\_\_\_.  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 1/2004.                            5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

This Office action is in answer to the amendment filed 10/14/2004. Claims 25, 26 and 30-32 are pending.

***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the third memory must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter: "third memory". See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 25, 26, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over

**Wagner et al.** [hereinafter Wagner][5903462] in view of prior art disclosed by applicant, **Gupta** [5349535].

At the outset, the examiner notes that claims are to be given their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow.... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process."). In responding to this Office action, applicants are reminded of the requirements of 37 CFR 1.111 and 1.119 that applicants specifically point out the specific distinctions believed to render the claims patentable over the references in presenting responsive arguments. See MPEP 714.02. The support of any amendments made should also be specifically pointed out. See MPEP 2163.06.

Gupta discloses a system for acquiring and storing information about a device including a Central Processing Unit CPU 10 including a Read Only Memory ROM 14 (or some other non-volatile memory)/first memory, which is part of a device; a non-volatile Random Access Memory RAM 15/second memory where the data gathered by CPU 10 is stored in order to hold the data when the CPU power supply is removed, or becomes too depleted to keep the system operating [see also the abstract; column 6, lines 44-68;

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column 7, lines 1-5]. The system will dump some or all of its accumulated information in a computer 52 via a telecommunications link 53 to a central computer 54 used for tracking functions and information about the device [column 10, lines 28-35]. With regard to computer 54 including a third memory: IEEE 7<sup>th</sup> edition defines a memory as storage used to execute instructions. Therefore, it is an inherent function of Gupta's computer 54 to include a third memory in order to be able to execute instructions/tracking, and MPEP 2100 states that the disclosure of a limitation may be expressed, implicit or **inherent**. Gupta's invention uses a microprocessor and associated electronics, sensors and memory to identify and accumulate statistics about the use of a device [see also column 5, lines 14-16]. Accumulation of usage history for would also allow a user a more accurate "on the fly" estimation of remaining life range [see also column 3, lines 51-54]. Gupta does not disclose the system being used to identify and accumulate statistics about the use of a power tool.

Wagner discloses a power tool (fig.1, and column 6, lines 20-28) including a first memory/non-volatile E<sup>2</sup>PROM memory 304 (column 8, line 19), storing use profile information about the power tool (column 5, lines 8-23, and column 8, line 19-20). The use profile information includes length of use: column 5, lines 19-20 describes "total turns counts since the tool was assembled and the total number of times a non-zero voltage has been applied to the motor". The power tool is connectable to a computer (column 6, line 46, and column 8, lines 32-33) via the Remote Computer Port (no separate reference numeral, fig.3), for downloading the stored use profile information.

The disclosure of Wagner differs from the claimed invention in not using the terminology "use profile information". MPEP 2111.01 states, "during patent examination, the pending claims must be given the broadest reasonable interpretation consistent with the specification". It would have been obvious to a person having ordinary skill in the art at the time the invention was made that the performance history/log in Wagner's apparatus provides use profile information since it analyzes data from a performance history recorded by the tool. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to include Gupta's teachings in Wagner's apparatus and include a second, in situ memory, as disclosed by Gupta, in order to hold the data when

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the CPU power supply is removed, or the CPU power supply becomes too depleted to keep the system operating, and a computer comprising a third memory, as disclosed by Gupta, in order to allow a user to analyze data from a performance history recorded by the tool.

Gupta and Wagner do not disclose specifically a reader apparatus. Applicant's specification describes "reader 50 receives the information, stores it into memory 52 and/or sends it to computer 53 for analysis". Therefore, either RAM 15 or computer 52 in Gupta's system inherently function as a reader apparatus, since they access and acquire data stored in the first memory, and MPEP 2100 states that the disclosure of a limitation may be expressed, implicit or **inherent**.

As to claim 26, the stored information comprising at least one of the group consisting of tool temperature, length of use, and number of times the tool has been turned on: the Wagner patent discloses "the operating parameters monitored comprise temperatures" (column 3, lines 33-34, and fig.3) and also "temperature transducers are also located within the (tool) housing to monitor among others the motor temperature and the temperature of the power supply which may be a battery. The output of the torque and temperature transducers will be represented as digital values to the processor" (column 2, lines 36-41). It would have been obvious to a person having ordinary skill in the art at the time the invention was made that the power supply temperature in Gupta's and Wagner's apparatus provides information about the power tool temperature since it analyzes data from a transducer located within the tool housing.

The Wagner patent also discloses that "the processor contains a clock which provides timing pulses as the interrupts to which the processor responds on periodic and asynchronous bases" and that "these performance records will...contain...time information on fasteners as they were tightened or loosened" (column 2, lines 48-50 and 59-60). It would have been obvious to a person having ordinary skill in the art at the time the invention was made that the time information on fasteners' operability in Gupta's and Wagner's apparatus provides information about the power tool length of use since the tool's function is to power up a fastener interface mechanism.

As to claims 30-32, see remarks for claims 25 and 26 above.

***Response to Arguments***

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection. Applicant amended the claim to include a reader apparatus comprising a second memory, and a computer comprising a third memory, which is new issue.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: JP-11048094 discloses calculating apparatus for heat variation amount of machine tool e.g. drill including for a **memory medium** for storing amount calculation program than can be read by personal computer. The prior art cited in PTO-892 and not mentioned above disclose related apparatus: **Vanderbrook et al.** [6018381] discloses a suitable reader (such as a computer) to read data, so that correction factors when in the form of machine readable data, may be just carried by the memory of a computer contained as part of a computer controlled device. This could allow a computer-controlled device to determine the necessary correction factor to be applied to the device after the user has made the visual comparison. **Wagner** [5742845] discloses that a reader is a computer having a processor and memory but usually provided with non-QWERTY keypads and limited displays. **Kainec et al.** [5637968] discloses a

microprocessor-based controller 104 of tool 10 that has two communication ports, one designated 118 for use with a printer, reader or host computer 120 and the other designated 122 for connection to a network 124 for uploading and downloading to a personal computer. **Austin** [4281379] discloses a control system for a numerically controlled (NC) machine tool which includes a direct access, time sharing, general purpose host computer located remotely from the location of the machine tool, and provided with a dedicated microprocessor located proximate the machine tool. The dedicated microprocessor has a storage memory in which at least one program may be stored. The microprocessor is operatively connected to the on-line computer through a port. The microprocessor in turn is connected to the machine control unit (MCU) of the NC machine tool by a reader interface. In operation, the on line computer is used on a time-share basis to generate a suitable machine control program. The machine control program is transferred to the dedicated microprocessor by means of the port connection. The machine control program may be edited or revised on a real time basis at the machine tool. Once the machine control program is found acceptable, it is independent of the host computer and it may be shifted from one machine to another independently of machine tool location. **Rhoades** [3679955] discloses in fig. 1, a control console 1 incorporating circuitry connected to provide command signals to operate an automatic machine tool 2. The command signals are produced in response to a program for cutting tool 3. Program data may be provided from a reader 6 or directly from a computer. **Ullmann et al.** [3806788] discloses in fig. 1 a numerical control system for a machine tool, and the machine control computer consists basically of a reader, a central processor or calculating means. Its input is a program relating to a particular job in the form data, which the reader of the system is adapted to read in the proper sequence. The **Illustrated Dictionary of Electronics by John Gibilisco** describes a reader as a device that transcribes digital signals into meaningful data. **IEEE** describes a reader as an input device capable of sensing stored information, and of conveying that information into on-line storage. **Anderson** [6189106] discloses a computer-based information handling system wherein the computer based-information handling system and method may be tangibly embodied on a medium

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readable by a computer-based information handling system capable of causing the computer-based information handling system to execute the method. **Abriam et al.** [5933353] discloses a computer usable medium having computer readable program code means embodied therein for machining parts from a work piece positioned on a numerically controllable (NC) machine, the computer readable program code means for causing a computer to utilize a database of machine instruction records for each of a plurality parts.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Pia Tibbits whose telephone number is (571) 272-2086. If unavailable, contact the Supervisory Patent Examiner Mike Sherry whose telephone number is (571) 272-2084. The Technology Center Fax number is (703) 872-9306.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PFT

November 3, 2004

Pia Tibbits

Primary Patent Examiner

